

The Cluster Head Selection Algorithm in the 3D USN

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Abstract— There are many cluster head selection algorithm for 2D space USN today. The LEACH algorithm is analyzed in the paper. It could be used for 3D space USN too. The new cluster head selection Maximum Coverage Algorithm (MCA) for homogeneous 3D USN is proposed in the paper. The LEACH and MCA full 3D coverage is compared by simulation on C++. The proposed algorithm supports the full 3D space of sensor field coverage for the longer time than LEACH.

Keywords— USN, Clustering, Algorithms, Coverage.



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